

Abstract

Angular motion driving mechanism and gear wheel for use in such mechanism

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Angular motion driving mechanism comprising, mounted on a supporting structure (SUP), a gear wheel (GW) for intermittent rotational movement in clockwise and counter-clockwise directions within an arc bounded by first and

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second angular positions (α_1 and α_2 , respectively) of the gear wheel (GW) with respect to the supporting structure (SUP), a driving gear (DG) being drivingly coupled to the drive motor (DM) and to the gear wheel (GW) imparting

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rotational movement to the gear wheel (GW) from said first to said second position (α_1 to α_2 , respectively) in an active mode of the drive motor (DM), a coiled torsion return spring (RS), which is flexed against its bias at rotational movement of the gear wheel (GW) from the first to the second angular position α_1 to α_2 in the active mode of the drive

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motor (DM), and which relaxes in the non-active mode of the drive motor (DM) by urging the gear wheel (GW) to return from the second to the first angular position (α_2 to α_1 , respectively). To avoid damaging peak collision impact when stopping the gear wheel in its return swing at its first

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angular position α_1 , the angular motion driving mechanism comprises a flexible end stop being constituted by a member (BT1) structurally fixated to the gear wheel (GW) and in said first position α_1 engaging with an first embossement (E1) of said supporting structure (SUP), said member (BT1) being

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flexed at contact collision with said first embossement (E1).

Figure 1